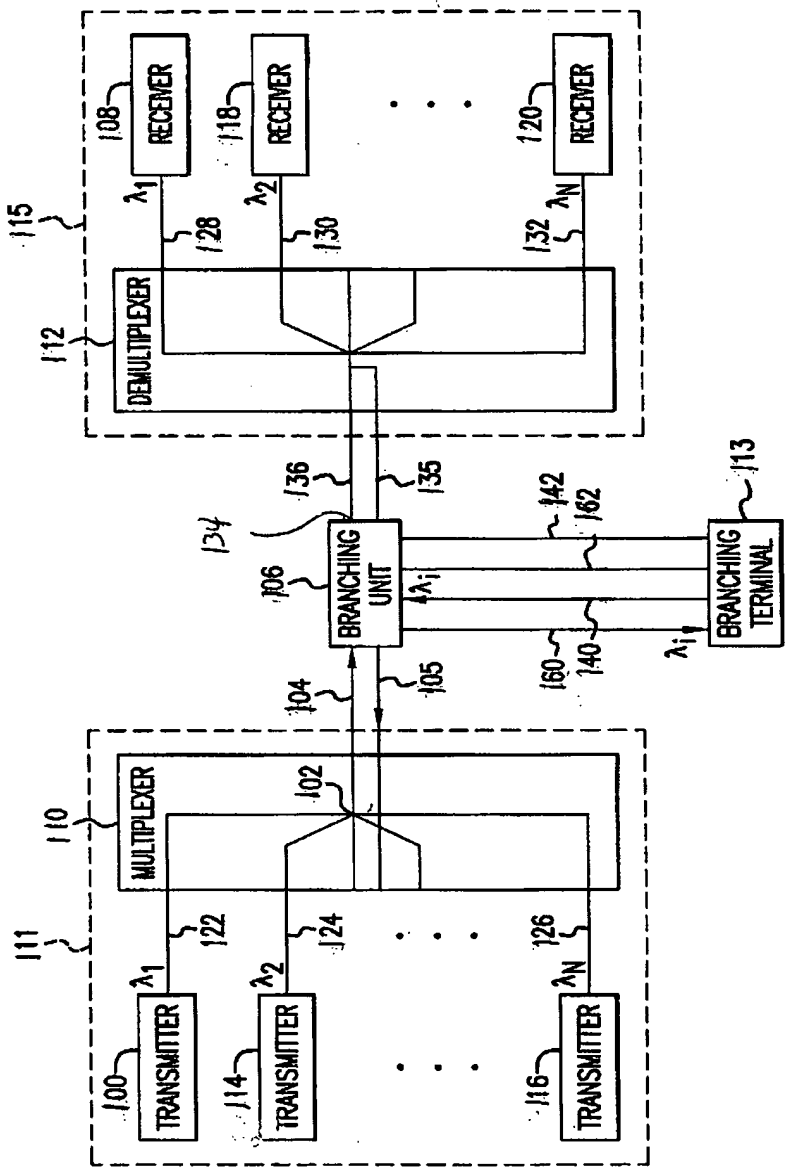
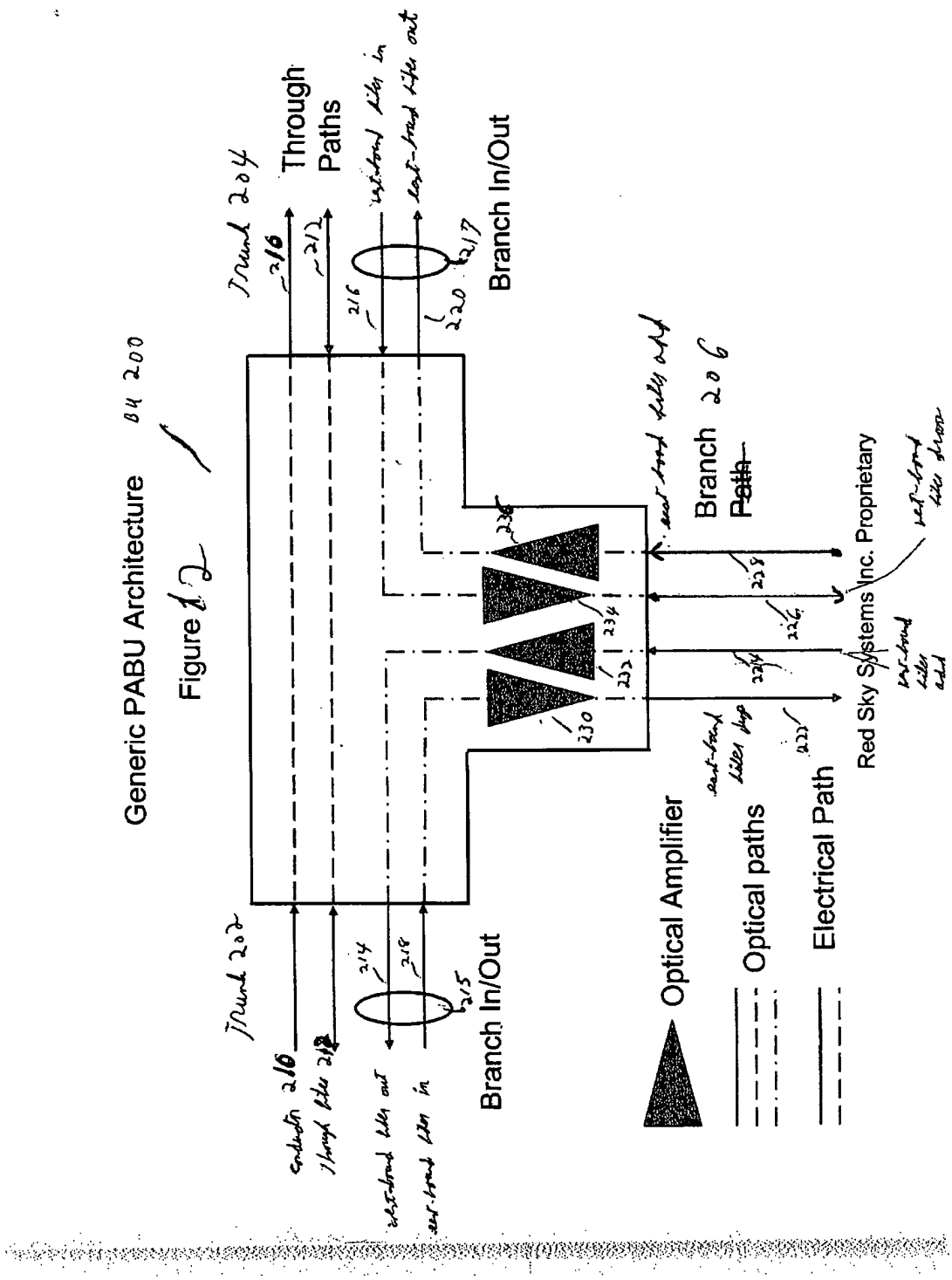

RECEIVER
RECEIVER
RECEIVER
108
118
120
λ_1
λ_2
λ_N
115
128
130
132
DEMULTIPLEXER
112
136
135
134
142
162
BRANCHING UNIT
106
λ_i
BRANCHING TERMINAL
113
160
140
λ_i
104
105
MULTIPLEXER
102
110
111
122
124
126
λ_1
λ_2
λ_N
TRANSMITTER
TRANSMITTER
TRANSMITTER
100
114
116

FIG. 1


Generic PABU Architecture
Figure 2
Through Paths
Branch In/Out
Branch In/Out
Branch Path
Optical Amplifier
Optical paths
Electrical Path
Red Sky Systems Inc. Proprietary

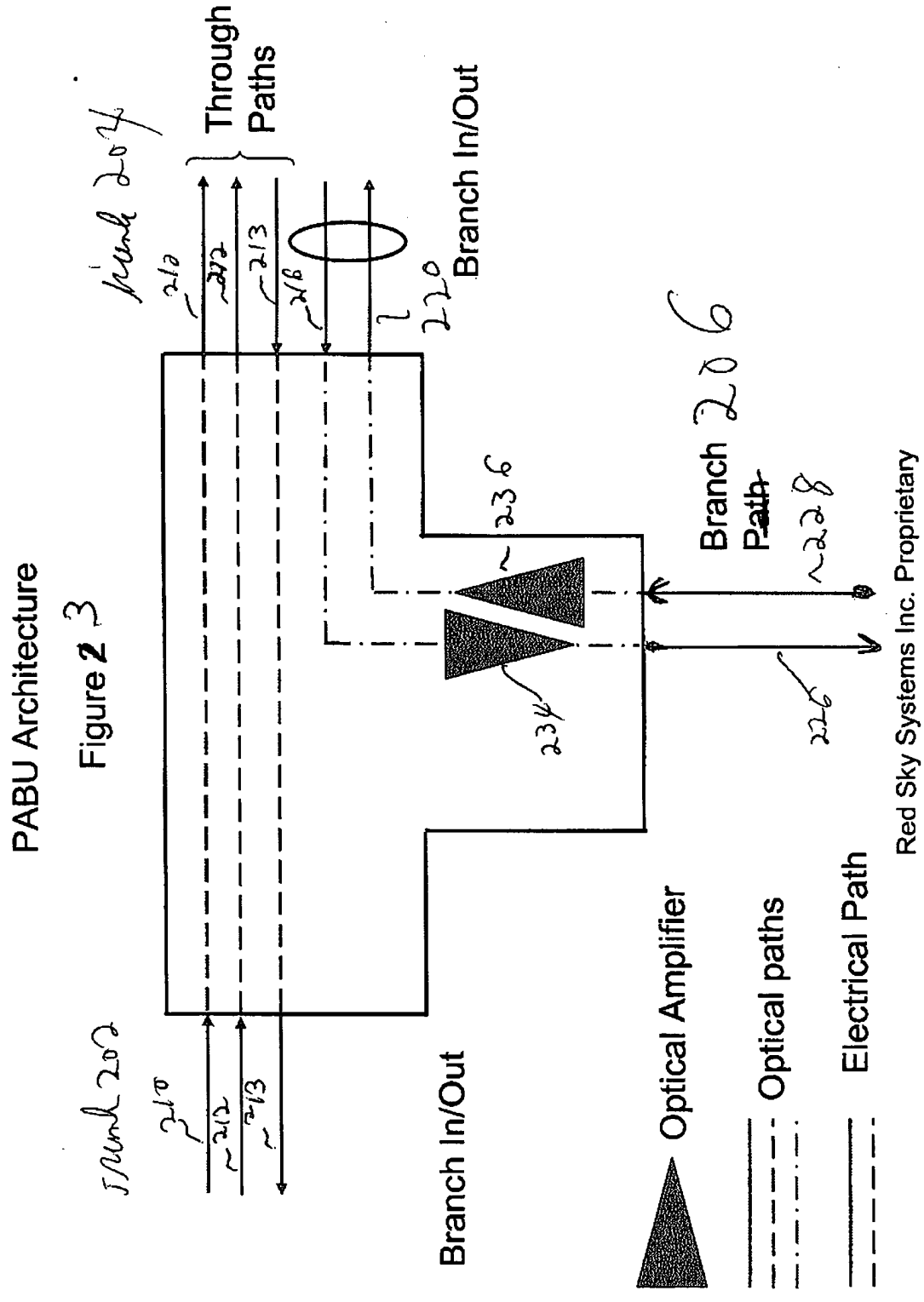

PABU Architecture
Through Paths
Branch In/Out
Branch In/Out
Branch Path
Optical Amplifier
Optical paths
Electrical Path
Red Sky Systems Inc. Proprietary

Figure 2

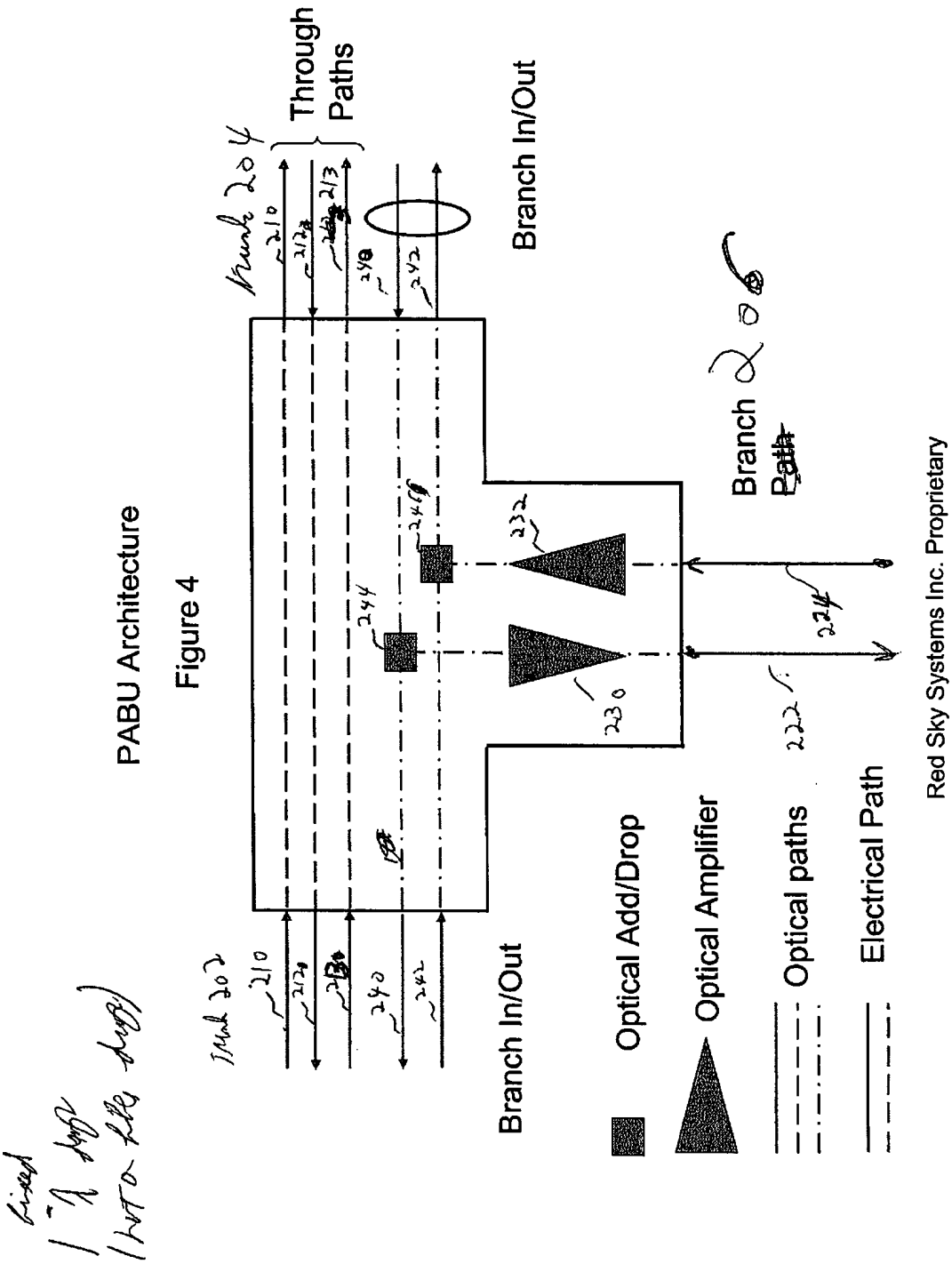
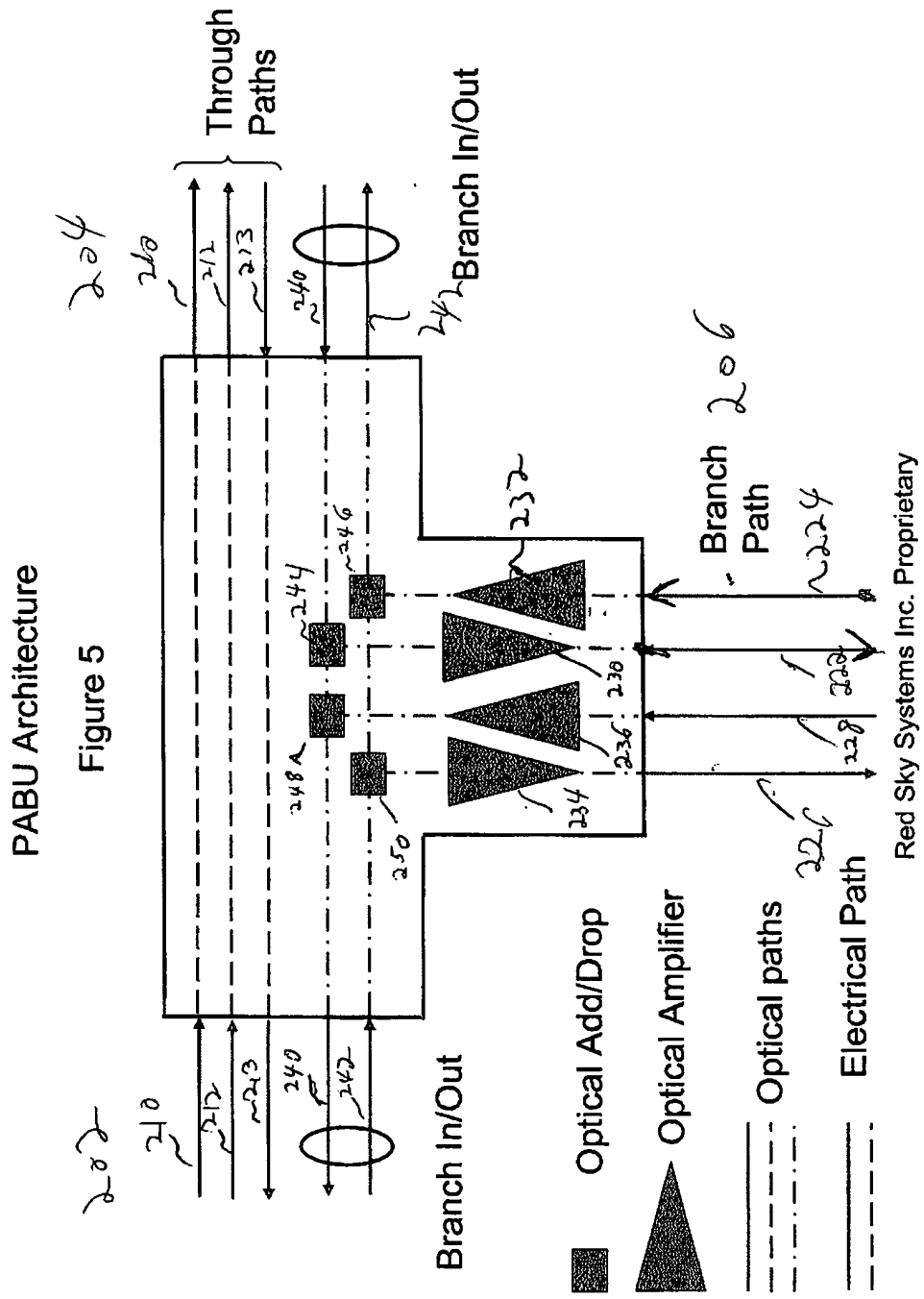

PABU Architecture
Through Paths
Branch In/Out
Branch In/Out
Branch Path
Optical Add/Drop
Optical Amplifier
Optical paths
Electrical Path
Red Sky Systems Inc. Proprietary

Figure 4


PABU Architecture
Figure 5
Through Paths
Branch In/Out
Branch In/Out
Branch Path
Optical Add/Drop
Optical Amplifier
Optical paths
Electrical Path
Red Sky Systems Inc. Proprietary

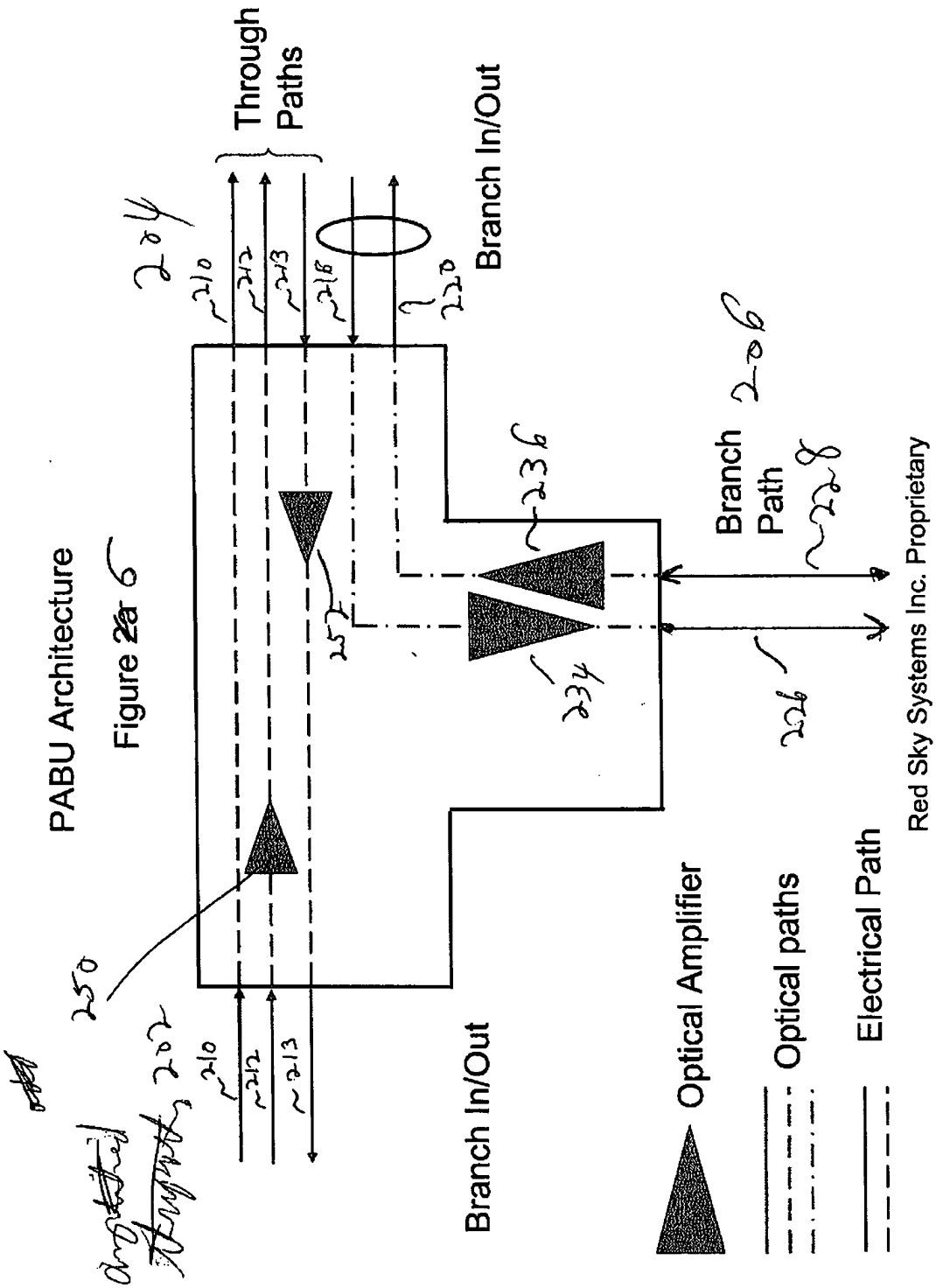
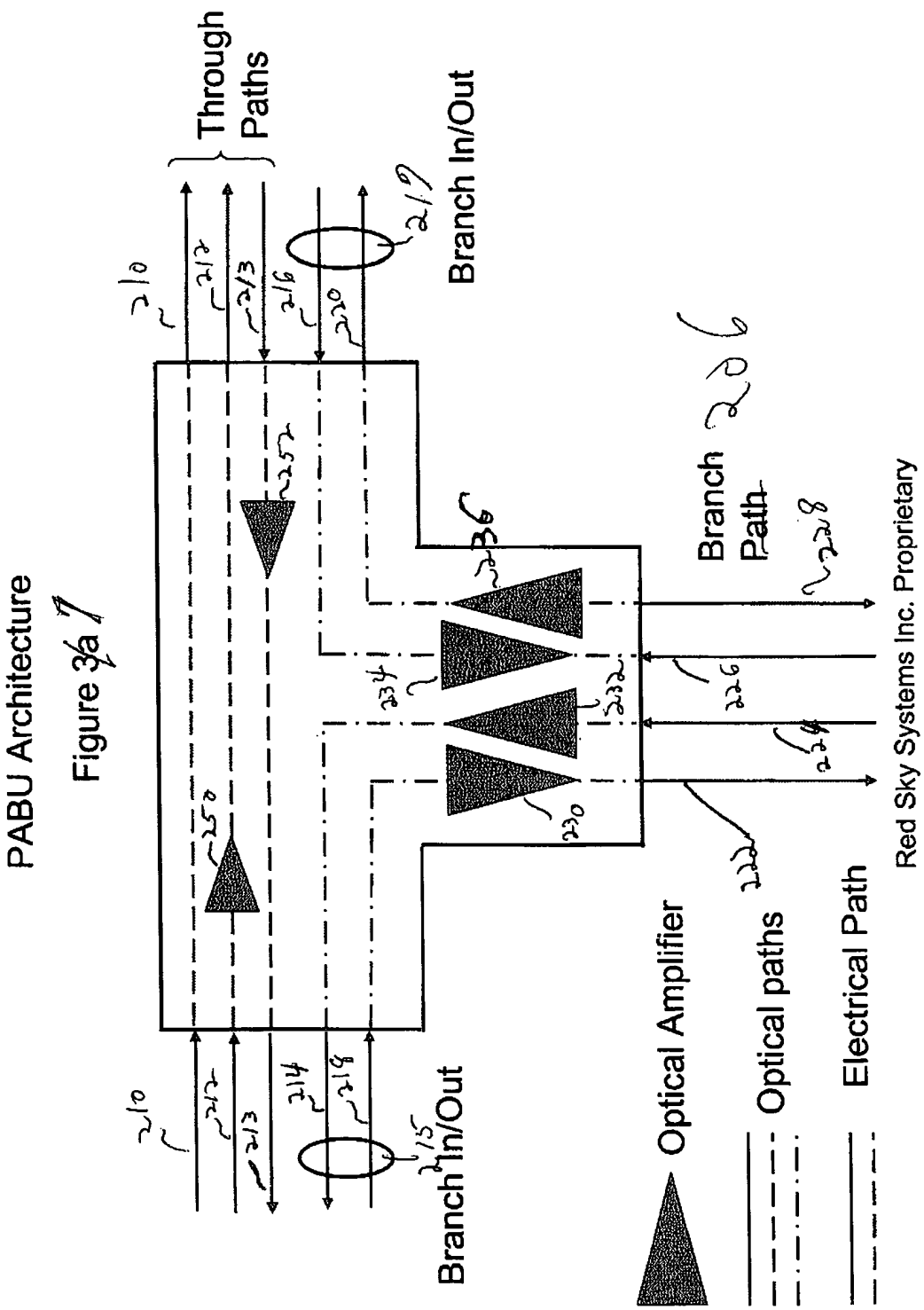
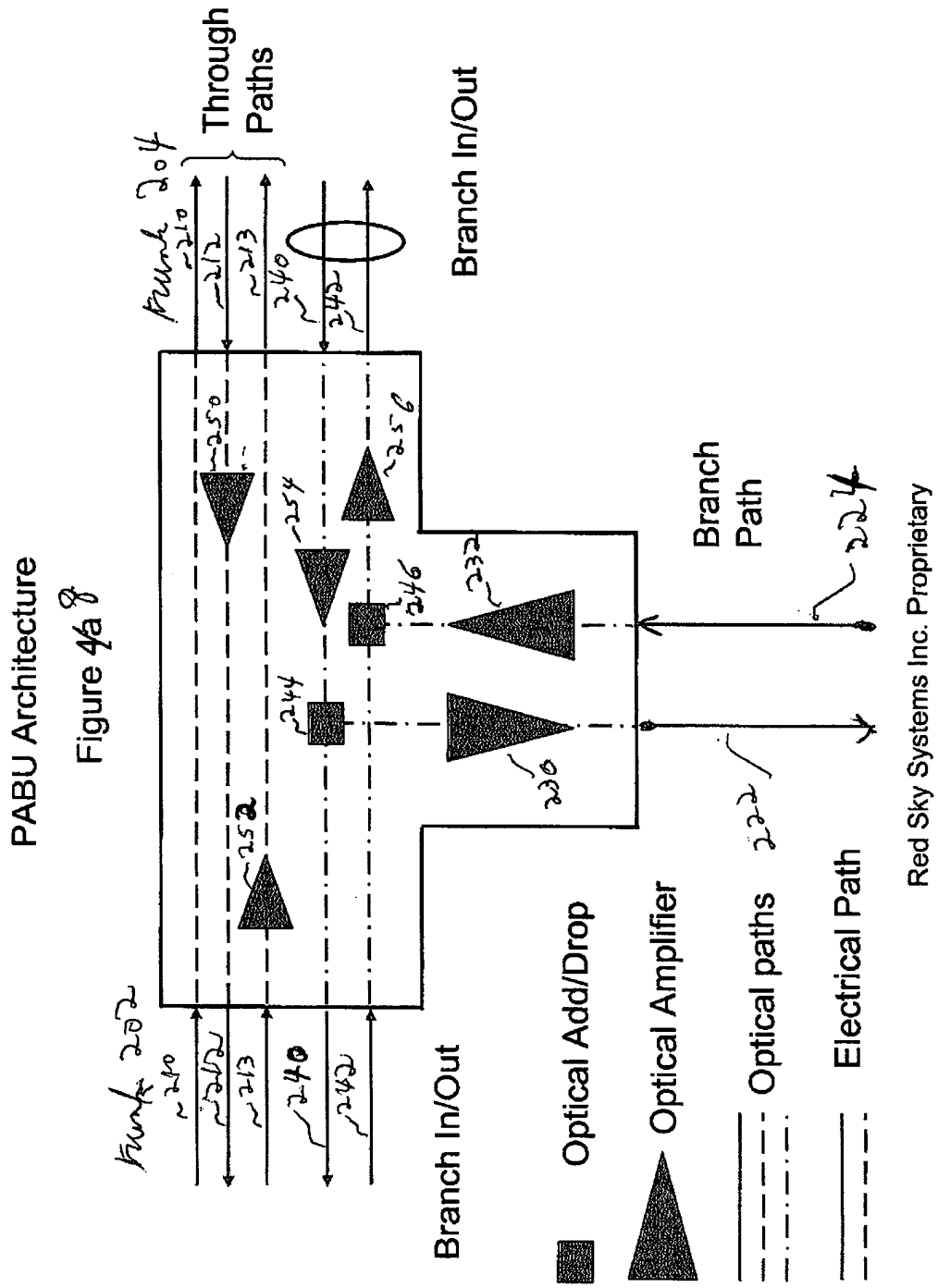
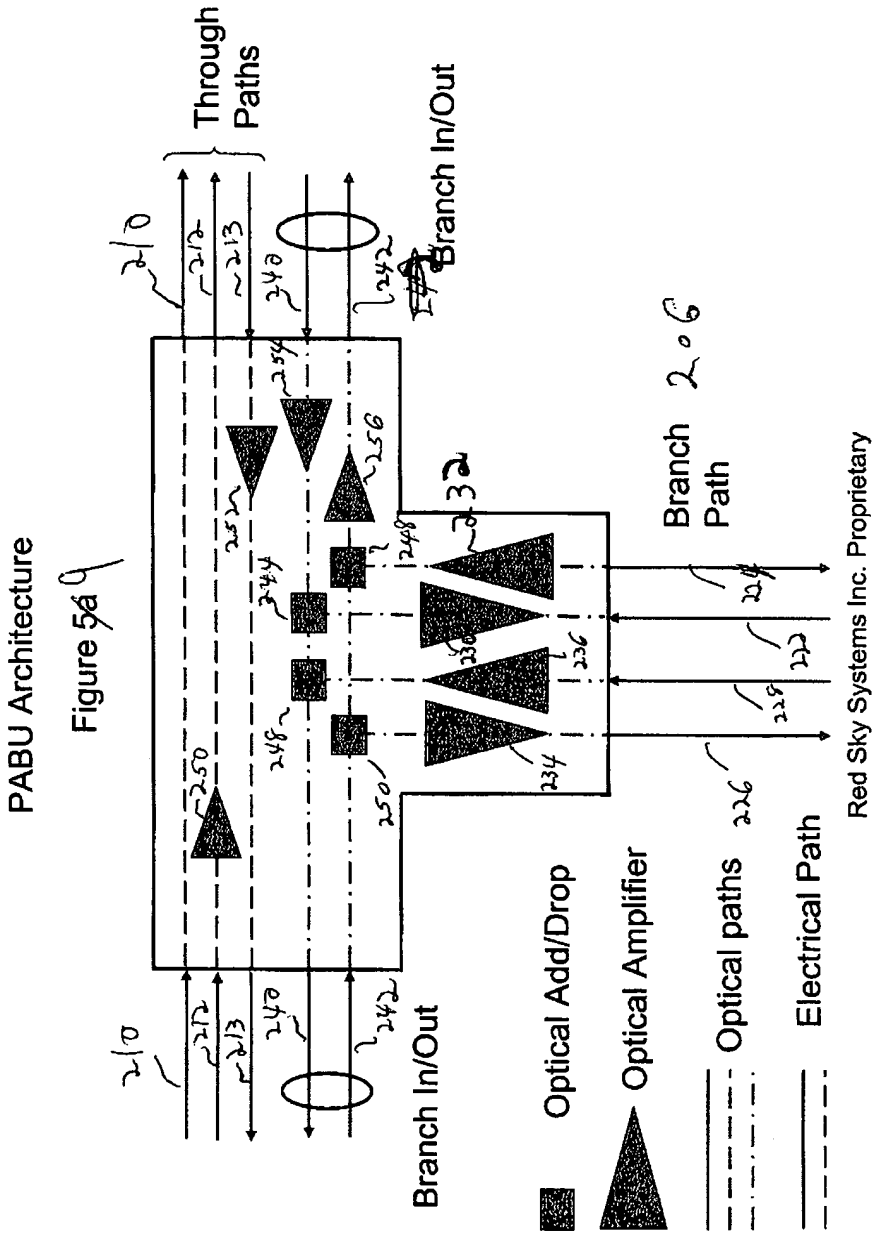

PABU Architecture
Through Paths
Branch In/Out
Branch In/Out
Branch Path
Optical Amplifier
Optical paths
Electrical Path
Red Sky Systems Inc. Proprietary

Figure 2a 6


PABU Architecture
Figure 3a
Through Paths
Branch In/Out
Branch In/Out
Branch Path
Optical Amplifier
Optical paths
Electrical Path
Red Sky Systems Inc. Proprietary


PABU Architecture
Figure 4a
Through Paths
Branch In/Out
Branch In/Out
Branch Path
Optical Add/Drop
Optical Amplifier
Optical paths
Electrical Path
Red Sky Systems Inc. Proprietary


PABU Architecture
Figure 5a
Through Paths
Branch In/Out
Branch In/Out
Branch Path
Optical Add/Drop
Optical Amplifier
Optical paths
Electrical Path
Red Sky Systems Inc. Proprietary

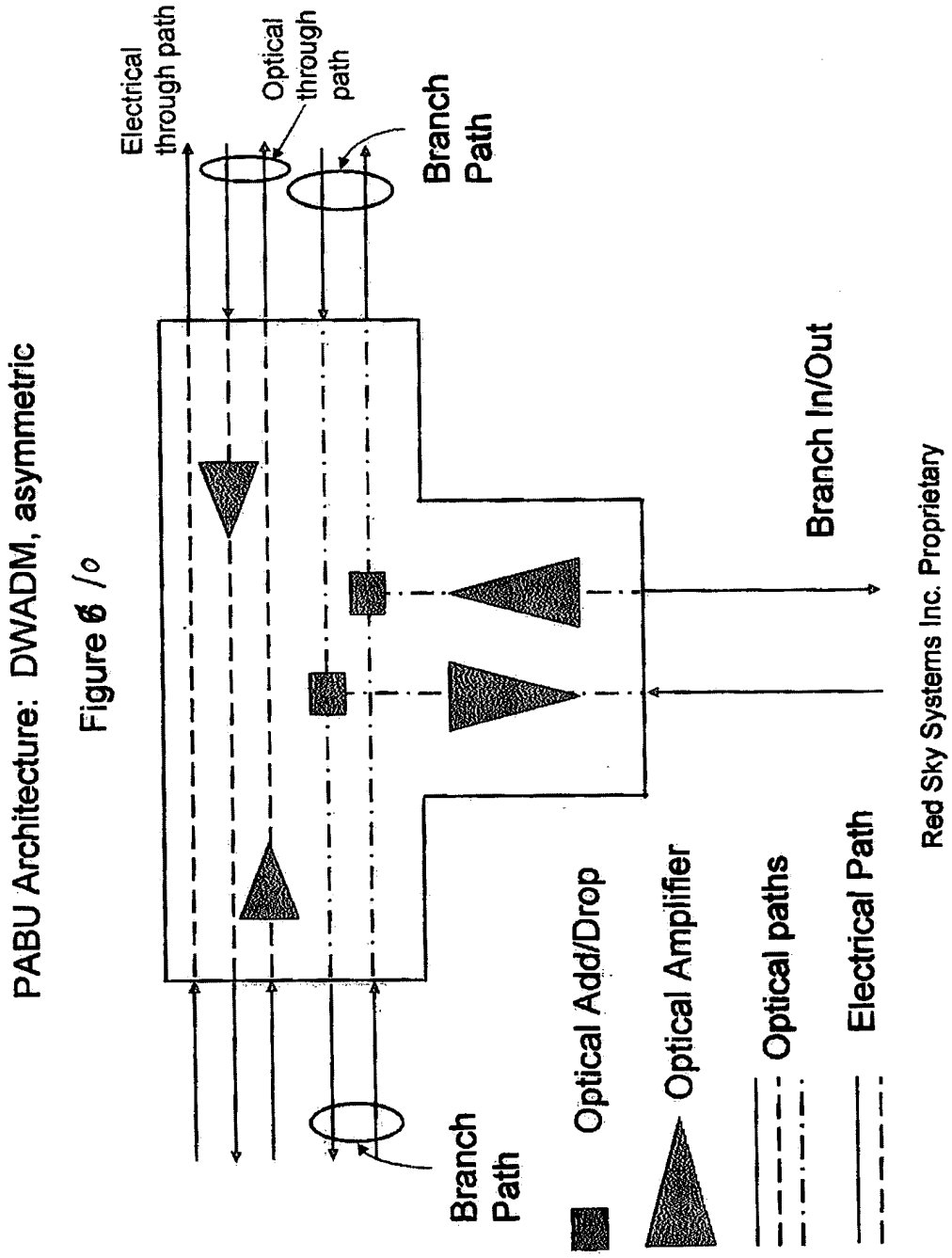
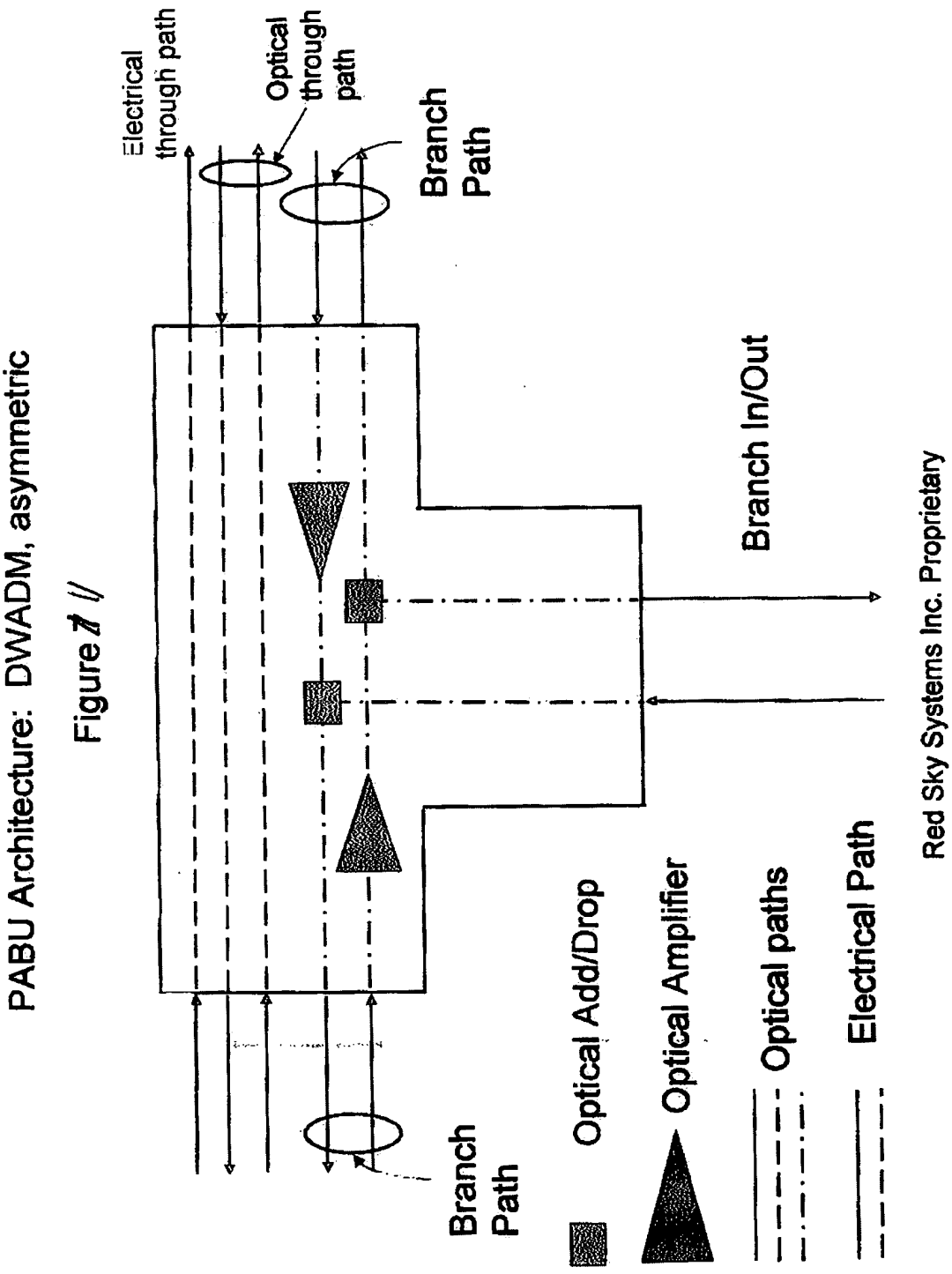
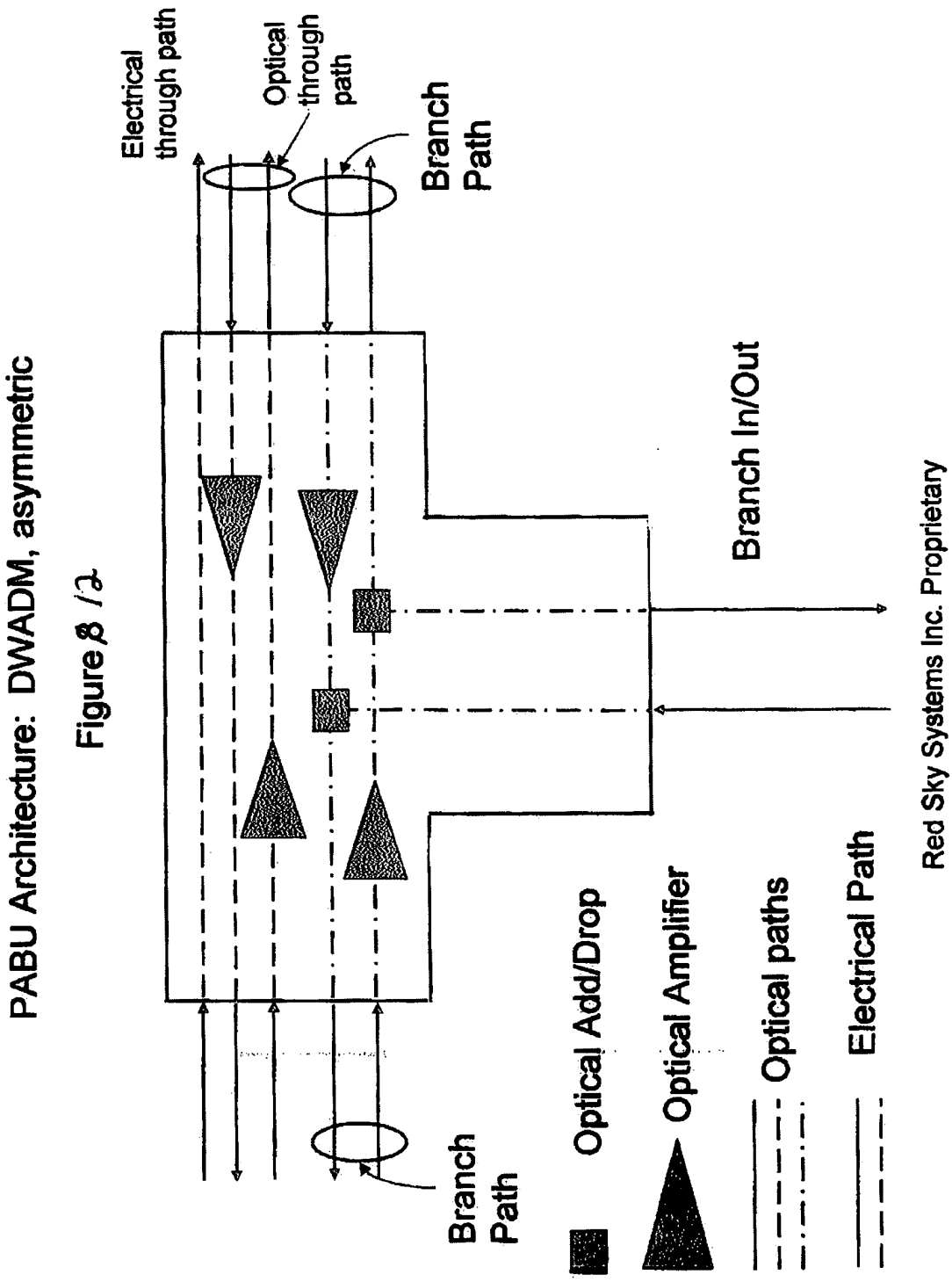
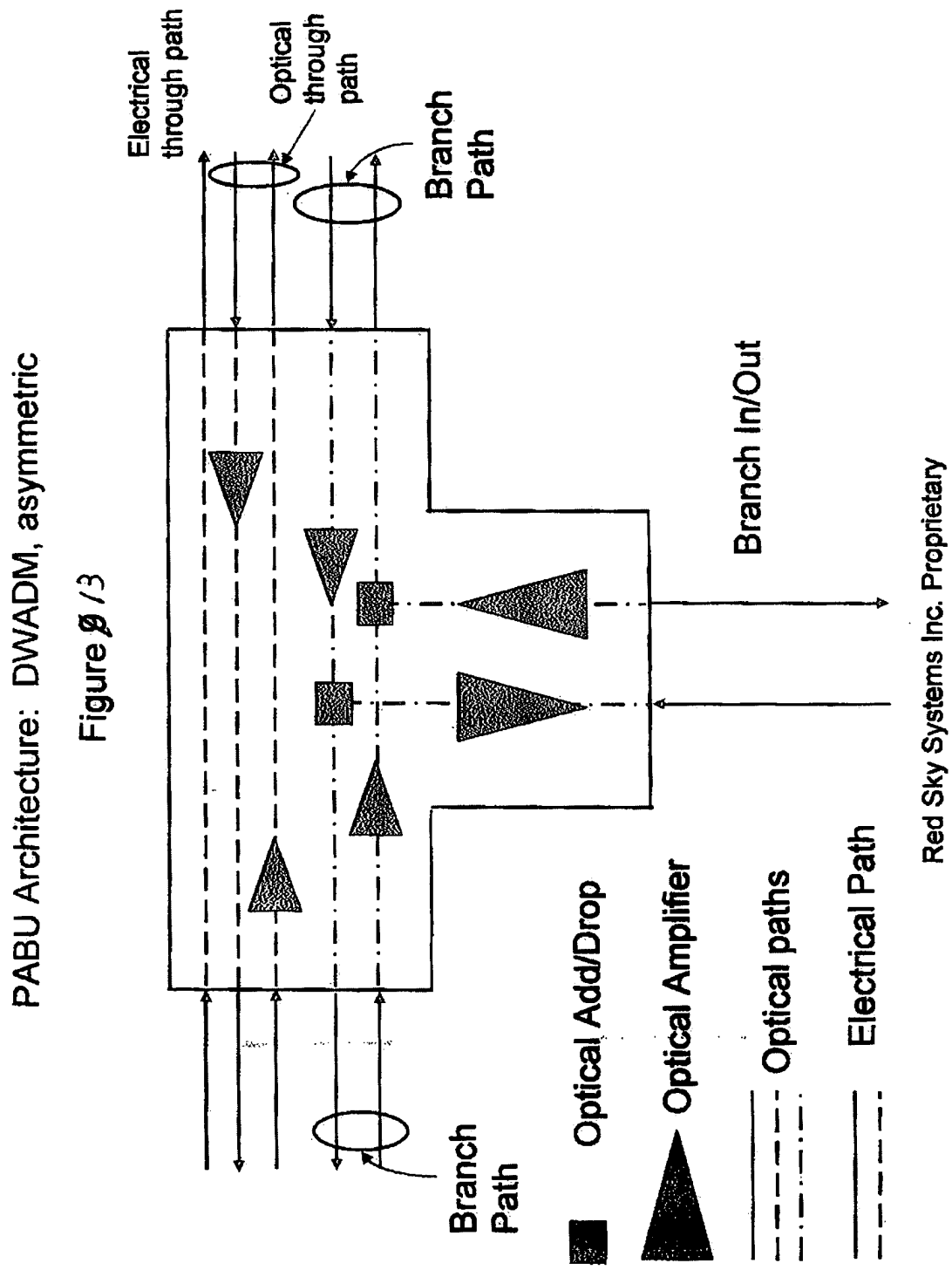
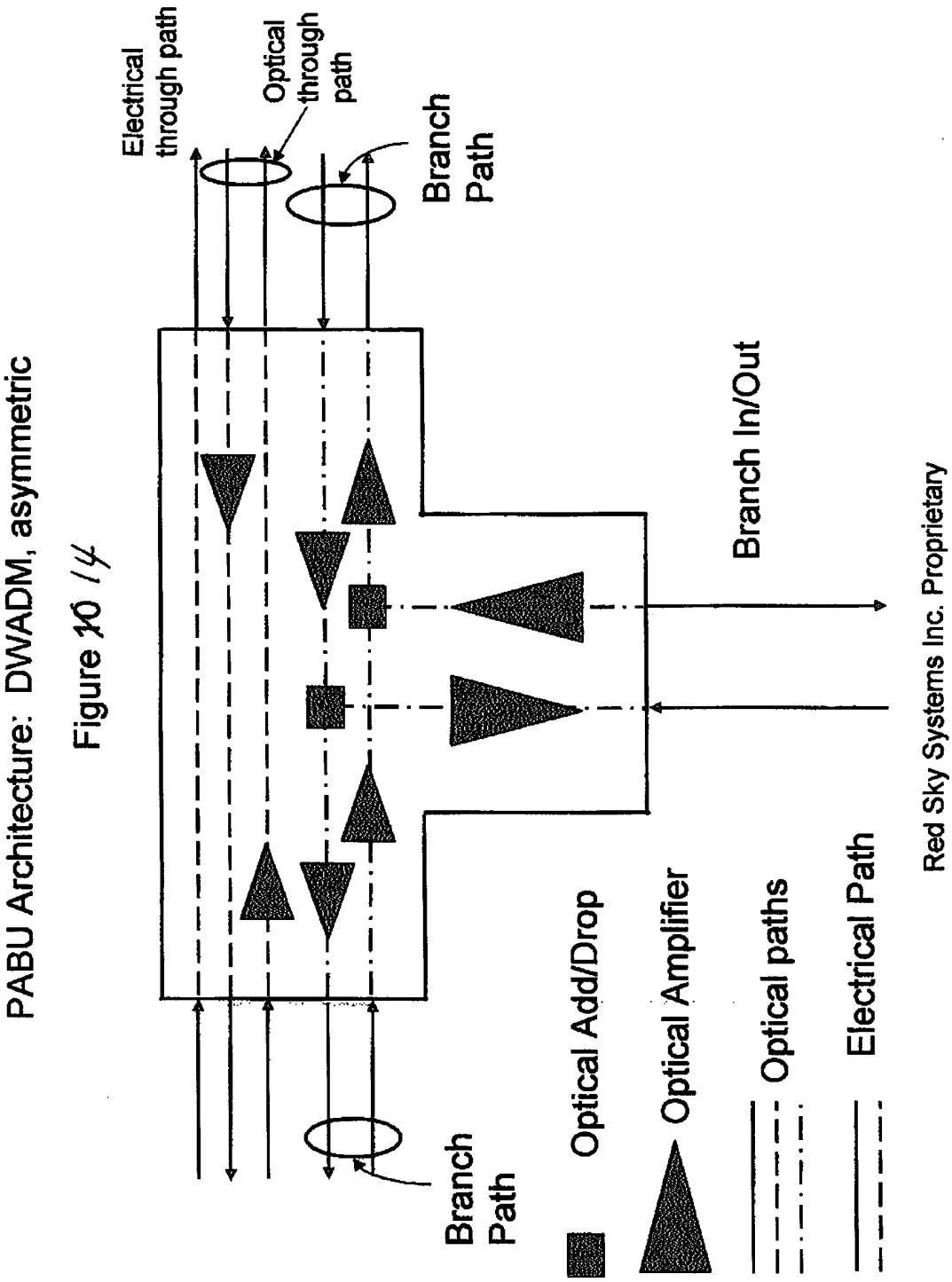

PABU Architecture: DWADM, asymmetric
Electrical through path
Optical through path
Branch Path
Branch In/Out
Branch Path
Optical Add/Drop
Optical Amplifier
Optical paths
Electrical Path
Red Sky Systems Inc. Proprietary

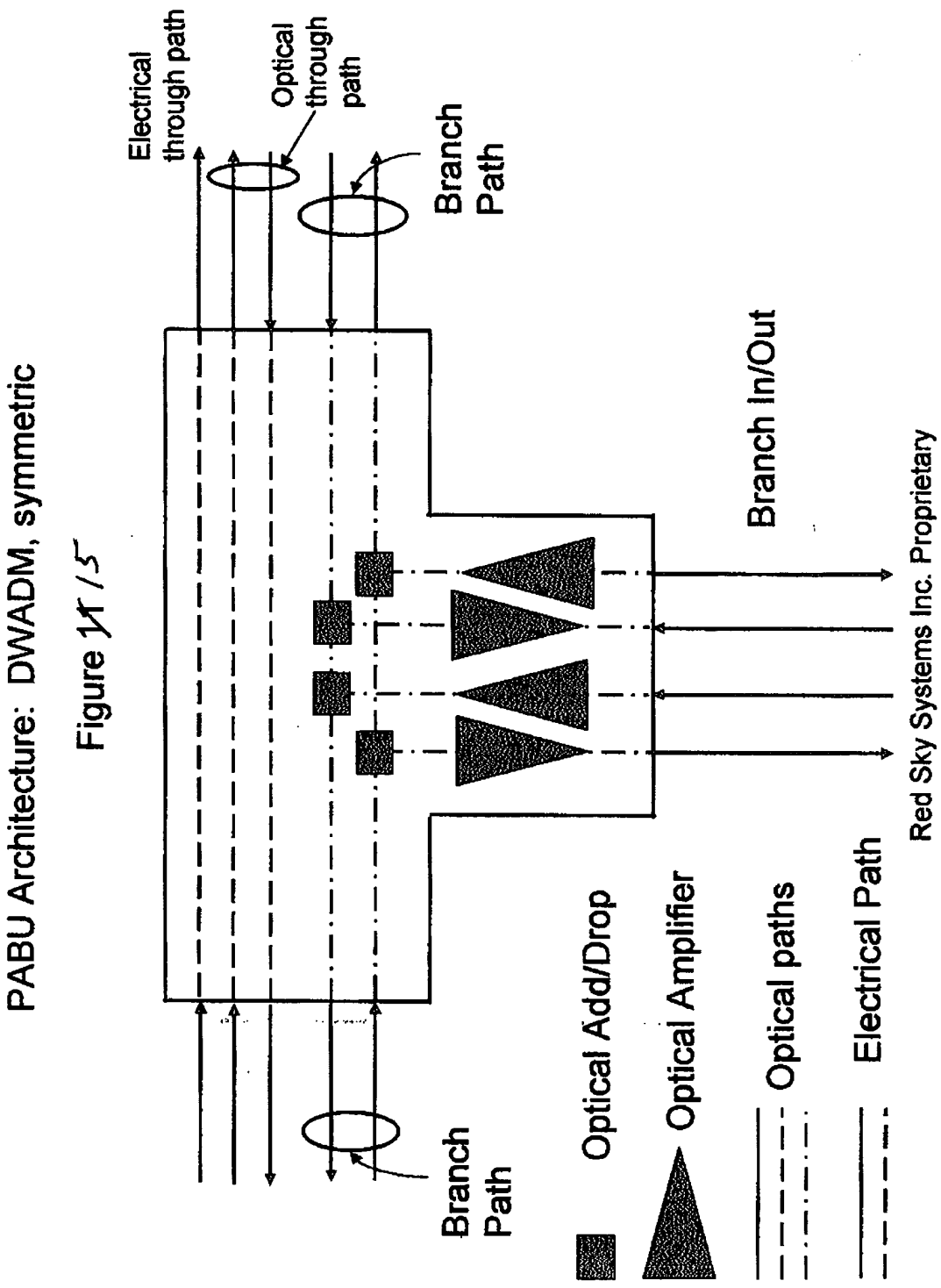
Figure 6 /0


PABU Architecture: DWADM, asymmetric
Figure 1 //
Electrical through path
Optical through path
Branch Path
Branch In/Out
Branch Path
Optical Add/Drop
Optical Amplifier
Optical paths
Electrical Path
Red Sky Systems Inc. Proprietary


PABU Architecture: DWADM, asymmetric
Figure 8 /2
Electrical through path
Optical through path
Branch Path
Branch In/Out
Branch Path
Optical Add/Drop
Optical Amplifier
Optical paths
Electrical Path
Red Sky Systems Inc. Proprietary


PABU Architecture: DWADM, asymmetric
Figure Ø /3
Electrical through path
Optical through path
Branch Path
Branch In/Out
Branch Path
Optical Add/Drop
Optical Amplifier
Optical paths
Electrical Path
Red Sky Systems Inc. Proprietary


PABU Architecture: DWADM, asymmetric
Figure 10 /4
Electrical through path
Optical through path
Branch Path
Branch In/Out
Branch Path
Optical Add/Drop
Optical Amplifier
Optical paths
Electrical Path
Red Sky Systems Inc. Proprietary


PABU Architecture: DWADM, symmetric
Figure 11/5
Electrical through path
Optical through path
Branch Path
Branch In/Out
Branch Path
Optical Add/Drop
Optical Amplifier
Optical paths
Electrical Path
Red Sky Systems Inc. Proprietary

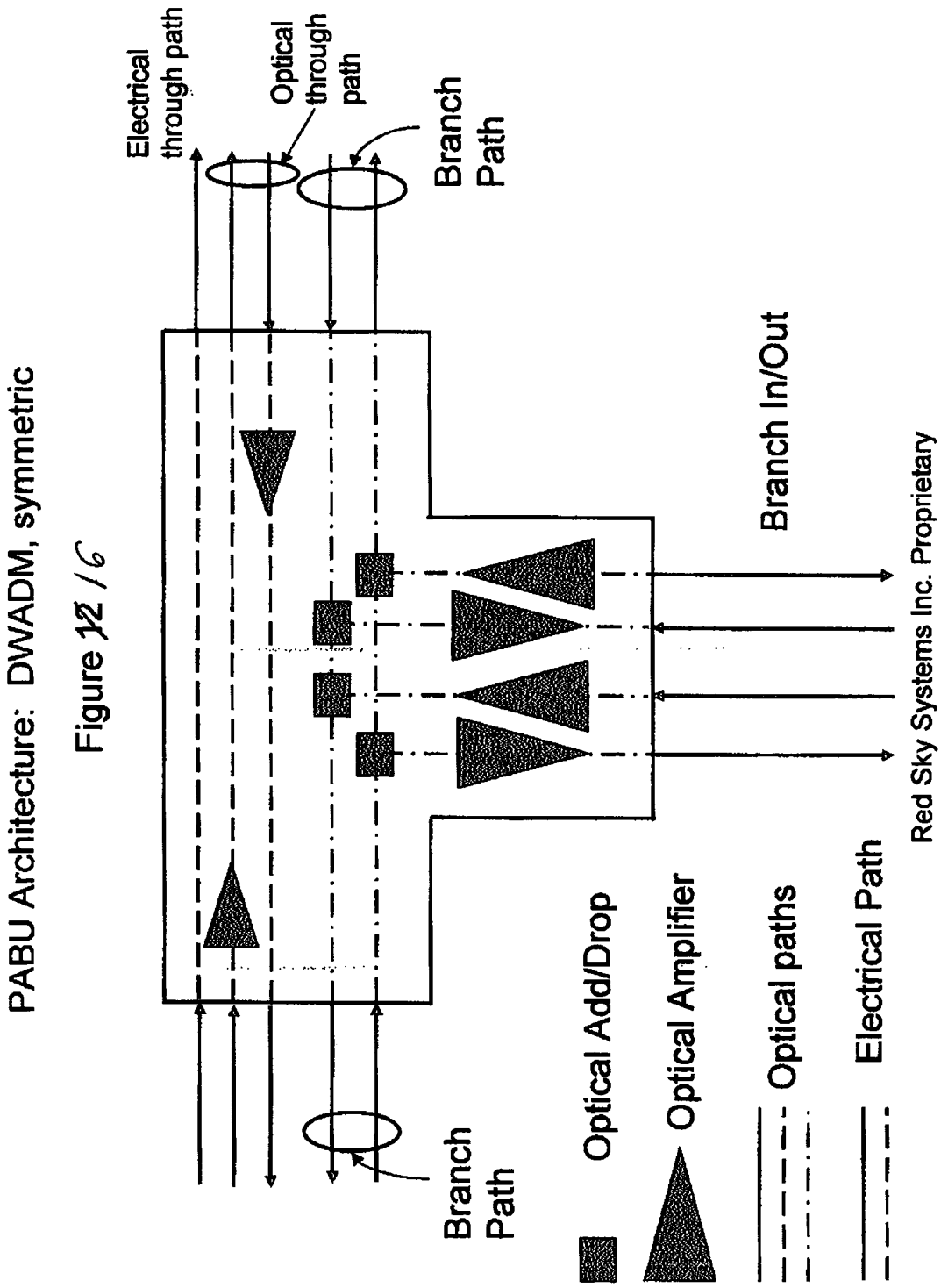
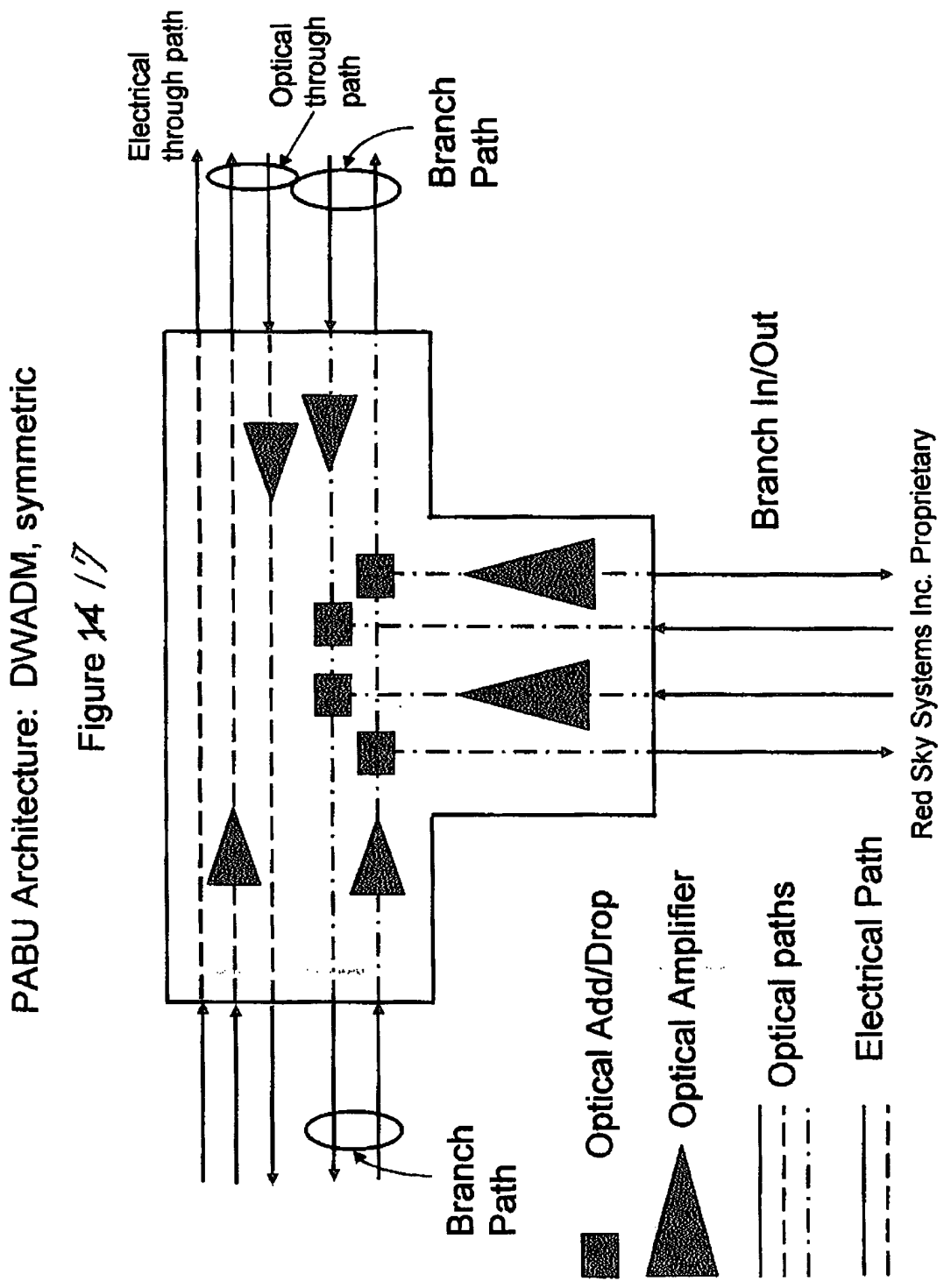

PABU Architecture: DWADM, symmetric
Electrical through path
Optical through path
Branch Path
Branch In/Out
Branch Path
Optical Add/Drop
Optical Amplifier
Optical paths
Electrical Path
Red Sky Systems Inc. Proprietary

Figure 12 / 6


PABU Architecture: DWADM, symmetric
Figure 14 /7
Electrical through path
Optical through path
Branch Path
Branch In/Out
Branch Path
Optical Add/Drop
Optical Amplifier
Optical paths
Electrical Path
Red Sky Systems Inc. Proprietary

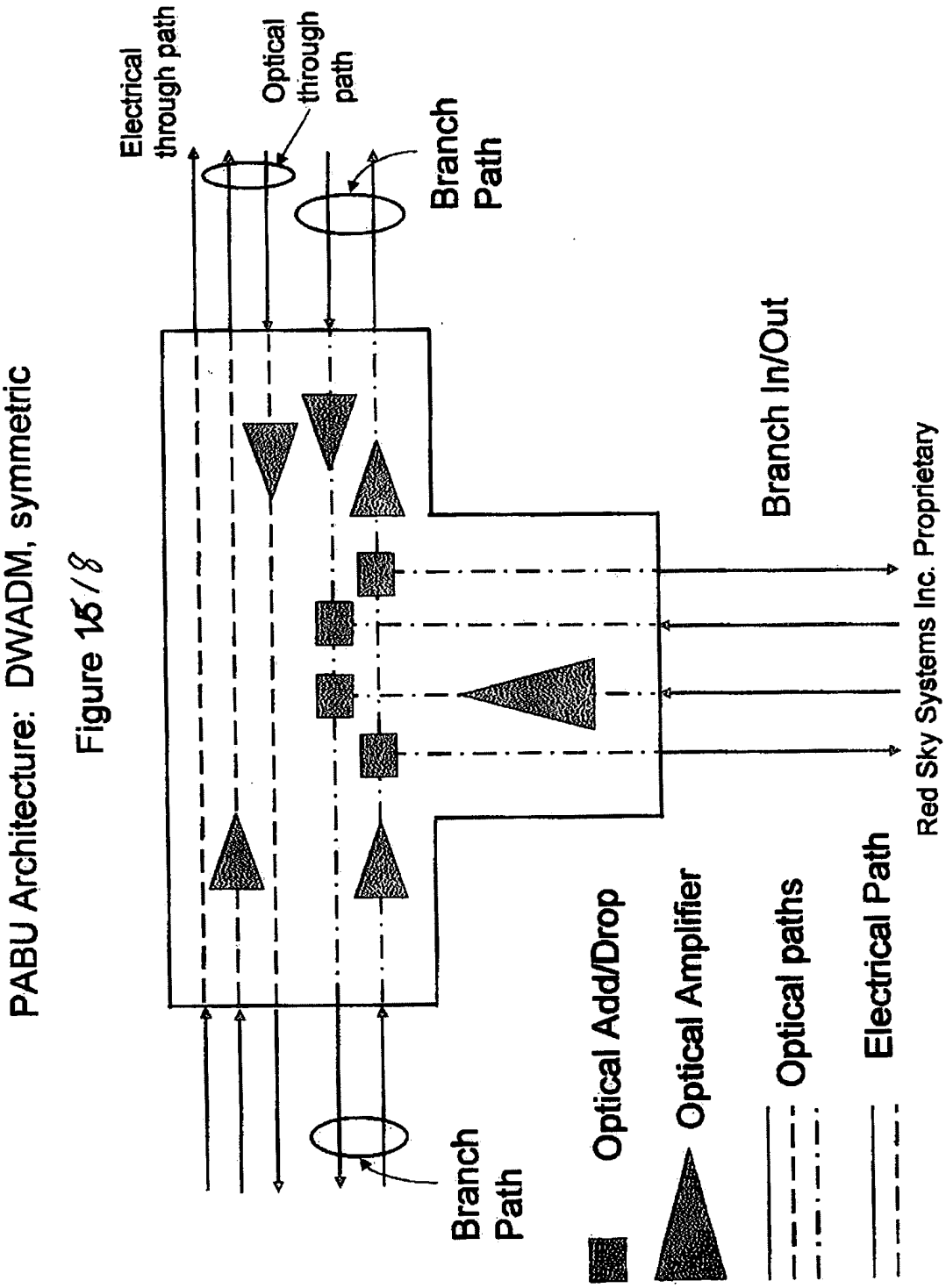
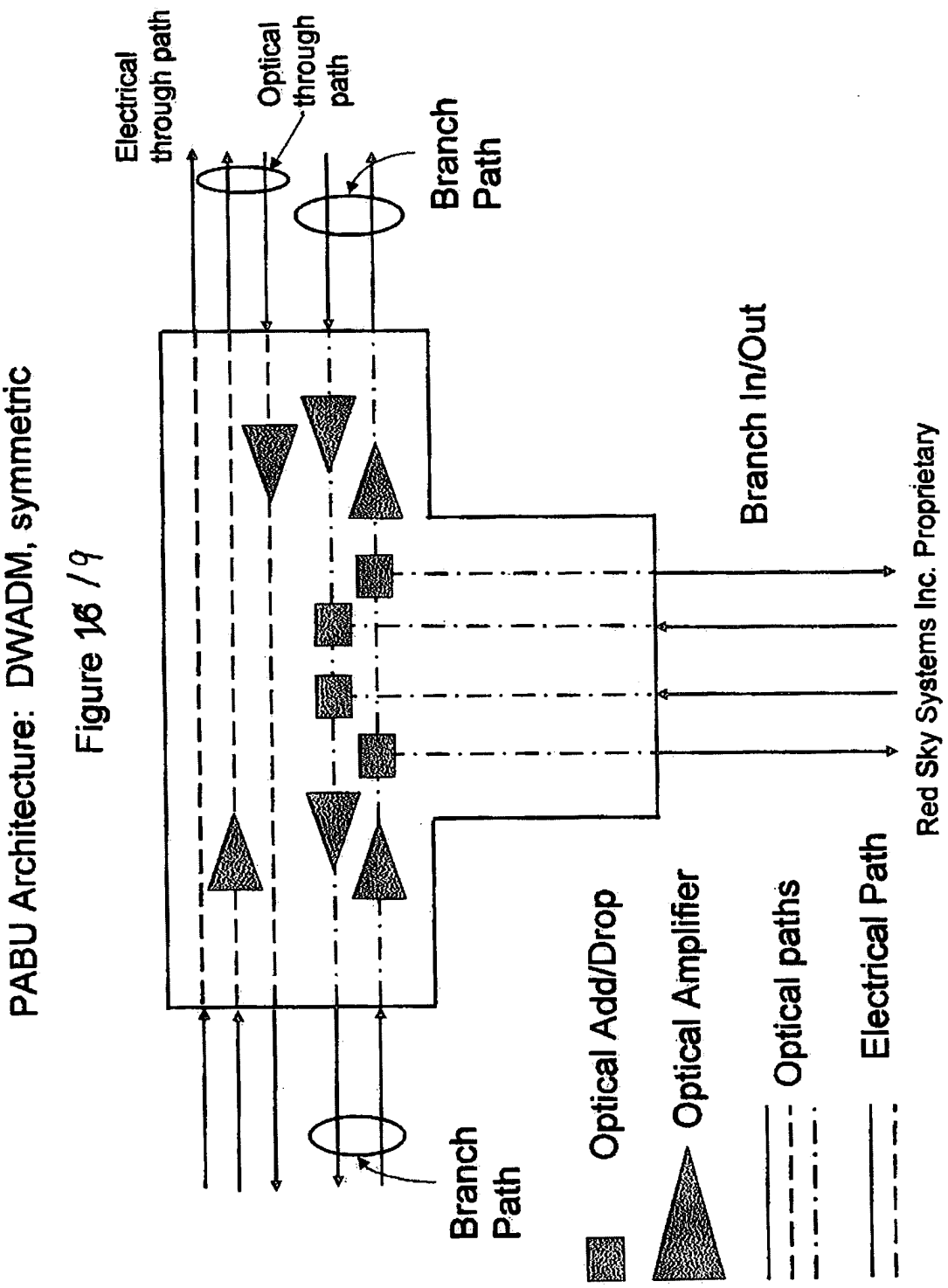

PABU Architecture: DWADM, symmetric
Electrical through path
Optical through path
Branch Path
Branch In/Out
Branch Path
Optical Add/Drop
Optical Amplifier
Optical paths
Electrical Path
Red Sky Systems Inc. Proprietary

Figure 15/8


PABU Architecture: DWADM, symmetric
Figure 16 / 9
Electrical through path
Optical through path
Branch Path
Branch In/Out
Branch Path
Optical Add/Drop
Optical Amplifier
Optical paths
Electrical Path
Red Sky Systems Inc. Proprietary